Mounting- and Service Manual for Service Units

Series
Futura

Description

Service unites normally consist of a filter - regulator - lubricator, there purpose is to purify the air and remove corrosive moisture and abrasive solids from the airstream as well as being able to regulate and reduce main line pressure and provide lubrication for various pneumatic control equipment eg. air tools, cylinders and systems.
When choosing and selecting a particular filter-regulator-lubricator assembly attention should always be focused on the correct regulations and safe working practices. By selecting the correct equipment improved service life will result in a reduction in downtime of pneumatic systems.
With the individual data sheets provided it is possible to select the correct equipment to suit every application and overall plant condition.

Installation

Any combination of units can be used however it is important to note that these service units must be mounted vertically. When wanting to ensure the most efficient operating system it is recommended that units are mounted as near as possible to the pneumatic control element or system.
The correct direction of flow is indicated by an arrow on the front of the head end.

Filter

Compressed air contains moisture and abrasive solids which if left unheaded would have an adverse effect on pneumatic controle equipment which the resultant loss of performance and eventually function.
It is important therefore to avoid any excessive pressure drop across the unit that the filter element is cleaned at regular service intervals. Also by visual inspection when excess condensate builds up in the filter bowl relieve by either switching off removing and cleaning the bowl or ensuring that the automatic drain is functioning correctly.
Various filter elements can be fitted depending on the particular application or environment, the standard grade of filtration is to 5 µm absolutely.

Pressure-Regulator

Pressure regulation is a means by which primary pressure (PE) is regulated using a control spring and diaphragm to hold steady the secondary pressure (PA) to a required level to operate downstream equipment and tooling.

Maintenance: Spare part service kits are available. It is advisable to check regularly wear parts and valve cones for signs of damage or wear when checking any unit make sure that this is carried out under fully safe conditions.

To set the pressure: Pull the adjusting knob, or release the lock nut (Regulator unlocked) then by tuning the knob adjust the pressure regulator to the desired pressure, finally press the adjusting knob, or set the lock nut (Regulator locked) down to fix the unit set at the desired pressure.

technical modifications keep in reserve!

Lubricator

Lubrication is by means of the creation of a airborne fog or mist that passes downstream to lubricate compressed air equipment and/or tooling. Most modern pneumatic control equipment is designed to function "lube free" however when using lubrication on air tooling service life is greatly improved.

Oil consumption: qv = 1000 l/min approx. 1-2 drops/min (standard)

Filling the oil reservoir manually:
The system must be pressureless
Remove the reservoir from the module
Fill the reservoir with the specified oil up to the marking
Re-insert the reservoir until it engages audibly

Fill the oil reservoir automatically:
The system must be under pressure to fill the reservoir automatically
Connect the oil hose to the oil reservoir nozzle and immerse in specified oil
Press the oil top-up button until the oil reaches the mark

Oil consumption:
It is possible to fill the lubricator units whilst under pressure by means of a vent plug screw. Slowly unscrew the vent plug relieving the bowl pressure and fill the lubricating oil up to the indicated mark and re-tighten the vent plug screw.

Recommended lubrication: CL 32 DIN 51517 - ISO VG 32
Any alternatives should be checked with the oil company suppliers.

General

Polycarbonate bowls should be cleaned only with water, soapsuds and similar neutral agents.
Cleaning agents which CKWs, aromatics or ketones contain or softeners secrete should not be used under any circumstances!!!

Max. working pressure for the filter and lubricator units: 16 bar

Max. primary-pressure (Pe) for pressure-regulator: 16 bar

Max. media and ambient temperature for filter, pressure-regulator and lubricator: 50°C

technical modifications keep in reserve!